



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/368,354	08/05/1999	ROBERT R. BUCKLEY	103044	5438
75	90 08/01/2005	EXAMINER		
OLIFF & BER		POKRZYWA, JOSEPH R		
P.O. BOX 1992 ALEXANDRIA	=		ART UNIT	PAPER NUMBER
ALLXANDRIA	1, VA 22320		, 2622	

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	tion No	Applicant(s)			
Office Action Summary					•		
		09/368,		BUCKLEY ET AL.			
	omoo nonon ounmary	Examine		Art Unit			
	The MAILING DATE of this communic	1 7	R. Pokrzywa	2622			
Period fo	The MAILING DATE of this communic or Reply	ation appears on ti	he cover sheet wi	th the correspondence ad	dress		
THE - Exte after - If the - If NO - Failt Any	IORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIC ensions of time may be available under the provisions of r SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) of period for reply is specified above, the maximum stature to reply within the set or extended period for reply wire reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	CATION. f 37 CFR 1.136(a). In no encication. days, a reply within the study period will apply and fill, by statute, cause the ag	event, however, may a re atutory minimum of thirt will expire SIX (6) MON oplication to become AB	eply be timely filed y (30) days will be considered timely THS from the mailing date of this co	y. ommunication		
Status							
1)[🛛	Responsive to communication(s) filed	on 27 June 2005.					
2a)□							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)	 ✓ Claim(s) 1-23 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. ☐ Claim(s) is/are allowed. ✓ Claim(s) 1-23 is/are rejected. ☐ Claim(s) is/are objected to. 						
Applicat	ion Papers						
10)□	The specification is objected to by the The drawing(s) filed on is/are: a Applicant may not request that any objecti Replacement drawing sheet(s) including to The oath or declaration is objected to the specific or th	a) accepted or book ion to the drawing(s) the correction is requ	be held in abeyan ired if the drawing(ce. See 37 CFR 1.85(a). (s) is objected to. See 37 CF			
Priority (under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for All b) Some * c) None of: 1. Certified copies of the priority do 2. Certified copies of the priority do 3. Copies of the certified copies of application from the International See the attached detailed Office action	ocuments have be ocuments have be the priority docum al Bureau (PCT Ru	en received. en received in A nents have been ule 17.2(a)).	pplication No received in this National	Stage		
Attachmen	ıt(s)						
1) 🛛 Notic	ce of References Cited (PTO-892)		4) Interview S	ummary (PTO-413)			
2) 🔲 Notic 3) 🔲 Infor	ce of Draftsperson's Patent Drawing Review (PTC) mation Disclosure Statement(s) (PTO-1449 or PT er No(s)/Mail Date		Paper No(s)/Mail Date formal Patent Application (PTO)-152)		

Art Unit: 2622

Page 2

Response to Arguments

DETAILED ACTION

- 1. Applicant's request for reconsideration 6/27/05 of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
- 2. Applicant's arguments, see pages 1-3, filed 6/27/05, with respect to the rejection(s) of claim(s) 1-23 under 35 U.S.C. 103(a) as being unpatentable over Asano (U.S. Patent Number 6,343,846) in view of Miller *et al.* (U.S. Patent Number 5,731,823) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further search and consideration, a new ground(s) of rejection is made in view of Allen *et al.* (U.S. Patent Number 5,633,662) and the previously cited Miller *et al.* (U.S. Patent Number 5,731,823, cited in the Office action dated 6/16/05).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen *et al*. (U.S. Patent Number 5,633,662) in view of Miller *et al*. (U.S. Patent Number 5,731,823, cited in the Office action dated 6/16/05).

Regarding *claim 1*, Allen discloses a method of processing image data of a color image for marking (see abstract), the color image containing overmarked pixels where at least one first color is to be overmarked by a second color (column 2, line 57-column 3, line 5, and column 4, lines 9-41), the method comprising generating information that designates the overmarked pixels (column 5, line 25-column 6, line 26, whereby the maximum total ink volume designates the counts of the color components at a pixel, with values over 255 designating an overmarked pixel), performing raster image processing to create a raster image of the color image (column 1, line 59-column 2, line 15), the raster image processing including overmarking processing that allows both the at least one first color and the second color to be separately included in the overmarked pixels in the same *image* (column 5, line 25-column 6, line 65), and modifying image data of the overmarked pixels in the *image* to achieve undercolor reduction by reducing a value corresponding to a reduced amount of an underlying marking material (column 4, lines 56-column 5, line 51).

However, Allen fails to expressly disclose if the overmarking processing that allows both the at least one first color and the second color to be separately included in the overmarked pixels in the same raster image, and modifying image data of the overmarked pixels in the raster image to achieve undercolor reduction by reducing a value corresponding to a reduced amount of an underlying marking material.

Miller discloses a method of processing image data of a color image for marking (see abstract), the color image containing overmarked pixels where at least one first color is to be overmarked by a second color (column 6, lines 25 through 52), the method comprising generating information that designates the overmarked pixels (column 3, lines 35 through 50,

Art Unit: 2622

and column 6, line 25 through column 7, line 13), performing raster image processing to create a raster image of the color image (column 5, lines 33 through 43, and column 7, lines 14 through 21), the raster image processing including overmarking processing that allows both the at least one first color and the second color to be separately included in the overmarked pixels in the same raster image (column 5, line 33-column 6, line 63, and column 7, lines 21-45), and modifying image data of the overmarked pixels in the raster image (column 5, lines 44 through 67, and column 7, lines 21 through 64).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's raster image processing teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of color printers, whereby rasterizing print data is in a typical process, as recognized by Miller in column 4, lines 42-67, being included in a PostScript printer. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 1.

Regarding *claim 2*, Allen and Miller disclose the method discussed above in claim 1, and Allen further teaches that the modifying the image data of the overmarked pixels comprises modifying image data corresponding to the at least one first color (column 4, lines 56-column 5, line 51).

Regarding *claim 3*, Allen and Miller disclose the method discussed above in claim 1, and Allen further teaches of outputting the *processed image*, including the modified image data, to a

Art Unit: 2622

marking driver (see Fig. 1, column 1, line 10-column 2, line 15, and column 5, lines 15-23). As discussed above, it would have been obvious to a person of ordinary skill in the art to have Miller's raster image processing teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of color printers, whereby rasterizing print data is in a typical process, as recognized by Miller in column 4, lines 42-67, being included in a PostScript printer. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 3.

Regarding *claim 4*, Allen and Miller disclose the method discussed above in claim 1, and Allen further teaches that the modifying image data of the overmarked pixels comprises modifying a value of the image data corresponding to the at least one first color (column 4, lines 56-column 5, line 51).

Regarding *claim 5*, Allen and Miller disclose the method discussed above in claim 4, and Allen further teaches that the modified value of the image data corresponding to the at least one first color results in a reduced amount of marking material corresponding to the at least one first color being applied to a marking substrate (column 4, lines 56-column 6, line 26).

Regarding *claim* 6, Allen and Miller disclose the method discussed above in claim 1, and Miller further teaches that the generating information that designates the overmarked pixels comprises generating tags that correspond to the overmarked pixels (column 3, lines 35 through 50, column 6, line 25 through column 7, line 13, and column 8, lines 6-18).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have

Page 6

been obvious to a person of ordinary skill in the art to have Miller's tag generation teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of rasterizing image data in color printers, whereby the type of data is identified and tagged, as recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 6.

Regarding claim 7, Allen and Miller disclose the method discussed above in claim 6, and Miller further teaches that the overmarked pixels correspond to a black image and the tags indicate that the overmarked pixels are black image pixels (column 6, line 25-column 7, line 54, and column 8, lines 6-18).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's tag generation teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of rasterizing image data in color printers, whereby the type of data is identified and tagged, as recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 7.

Regarding claim 8, Allen and Miller disclose the method discussed above in claim 6, and Miller further teaches that the overmarked pixels correspond to one of black text and a black

stroke (column 6, line 25-column 7, line 54), and the tags indicate that the overmarked pixels are one of black text pixels and black stroke pixels (column 6, line 25-column 7, line 54, and column 8, lines 6-18).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's tag generation teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of rasterizing image data in color printers, whereby the type of data is identified and tagged, as recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 8.

Regarding *claim 9*, Allen and Miller disclose the method discussed above in claim 1, and Miller further teaches that the generating information that designates the overmarked pixels comprises performing pattern recognition that recognizes specified patterns (see abstract, column 3, lines 35 through 65), and designating pixels that form the recognized patterns as the overmarked pixels (column 6, line 25 through column 7, line 54).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's pattern recognition teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of

image data processing in color printers, whereby the type of data is identified and characterized, as recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system.

Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 9.

Regarding *claim 10*, Allen discloses a system that processes image data of a color image for marking (see abstract), the color image containing overmarked pixels where at least one first color is to be overmarked by a second color (column 2, line 57-column 3, line 5, and column 4, lines 9-41), the system comprising an overmarked pixel designator that generates information that designates the overmarked pixels (column 5, line 25-column 6, line 26, whereby the maximum total ink volume designates the counts of the color components at a pixel, with values over 255 designating an overmarked pixel), a raster image processor that creates a raster image of the color image (column 1, line 59-column 2, line 15), the raster image processor provided with an overmarking function that allows both the at least one first color and the second color to be separately included in the overmarked pixels in the same *image* (column 5, line 25-column 6, line 65), and an image data modification unit that modifies image data of the overmarked pixels in the *image* to achieve undercolor reduction by reducing a value corresponding to a reduced amount of an underlying marking material (column 4, lines 56-column 5, line 51).

However, Allen fails to expressly disclose if the overmarking processing that allows both the at least one first color and the second color to be separately included in the overmarked pixels in the same *raster image*, and modifying image data of the overmarked pixels in the *raster image* to achieve undercolor reduction by reducing a value corresponding to a reduced amount of an underlying marking material.

Art Unit: 2622

Miller discloses a system that processes image data of a color image for marking (see abstract), the color image containing overmarked pixels where at least one first color is to be overmarked by a second color (column 6, lines 25 through 52), the system comprising an overmarked pixel designator that generates information that designates the overmarked pixels (column 3, lines 35 through 50, and column 6, line 25 through column 7, line 13), a raster image processor that creates a raster image of the color image (column 5, lines 33 through 43, and column 7, lines 14 through 21), the raster image processor provided with an overmarking function that allows both the at least one first color and the second color to be separately included in the overmarked pixels in the same raster image (column 5, line 33-column 6, line 63, and column 7, lines 21-45), and an image data modification unit that modifies image data of the overmarked pixels in the raster image (column 5, lines 44 through 67, and column 7, lines 21 through 64).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's raster image processing teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of color printers, whereby rasterizing print data is in a typical process, as recognized by Miller in column 4, lines 42-67, being included in a PostScript printer. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 10.

Regarding *claim 11*, Allen and Miller disclose the system discussed above in claim 10, and Allen further teaches that the modified image data is image data corresponding to the at least one first color (column 4, lines 56-column 5, line 51).

Regarding *claim 12*, Allen and Miller disclose the system discussed above in claim 10, and Allen further teaches of a marking driver that performs marking according to the *processed image*, including the modified image data (see Fig. 1, column 1, line 10-column 2, line 15, and column 5, lines 15-23). As discussed above, it would have been obvious to a person of ordinary skill in the art to have Miller's raster image processing teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of color printers, whereby rasterizing print data is in a typical process, as recognized by Miller in column 4, lines 42-67, being included in a PostScript printer. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 12.

Regarding *claim 13*, Allen and Miller disclose the system discussed above in claim 10, and Allen further teaches that the image data modification unit modifies a value of the image data corresponding to the at least one first color (column 4, lines 56-column 5, line 51).

Regarding *claim 14*, Allen and Miller disclose the system discussed above in claim 13, and Allen further teaches that a marking driver performs marking according to the *processed image*, including the modified image data (see Fig. 1, column 1, line 10-column 2, line 15, and column 5, lines 15-23), wherein the marking driver marks a reduced amount of marking material corresponding to the at least one first color on a marking substrate based on the modified value of the image data corresponding to the at least one first color (column 4, lines 56-column 6, line

26). As discussed above, it would have been obvious to a person of ordinary skill in the art to have Miller's raster image processing teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of color printers, whereby rasterizing print data is in a typical process, as recognized by Miller in column 4, lines 42-67, being included in a PostScript printer. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 14.

Regarding *claim 15*, Allen and Miller disclose the system discussed above in claim 10, and Miller further teaches that the overmarked pixel designator comprises a tag generator that generates tags that correspond to the overmarked pixels (column 3, lines 35 through 50, column 6, line 25 through column 7, line 13, and column 8, lines 6-18).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's tag generation teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of rasterizing image data in color printers, whereby the type of data is identified and tagged, as recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 15.

Regarding *claim 16*, Allen and Miller disclose the system discussed above in claim 15, and Miller further teaches that the overmarked pixels correspond to a black image and the tags

indicate that the overmarked pixels are black image pixels (column 6, line 25-column 7, line 54, and column 8, lines 6-18).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's tag generation teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Asano's system would conform with well known standards in the art of rasterizing image data in color printers, whereby the type of data is identified and tagged, as recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 16.

Regarding *claim 17*, Allen and Miller disclose the system discussed above in claim 15, and Miller further teaches that the overmarked pixels correspond to one of black text and a black stroke (column 6, line 25-column 7, line 54), and the tags indicate that the overmarked pixels are one of black text pixels and black stroke pixels (column 6, line 25-column 7, line 54, and column 8, lines 6-18).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's tag generation teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of rasterizing image data in color printers, whereby the type of data is identified and tagged, as

recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system.

Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 17.

Regarding *claim 18*, Allen and Miller disclose the system discussed above in claim 10, and Miller further teaches that the overmarked pixel generator comprises a pattern recognition device that recognizes specified patterns (see abstract, column 3, lines 35 through 65), and designates pixels that form the recognized patterns as the overmarked pixels (column 6, line 25 through column 7, line 54).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have Miller's pattern recognition teachings included within the image processing teachings of Allen. The suggestion/motivation for doing so would have been that Allen's system would conform with well known standards in the art of image data processing in color printers, whereby the type of data is identified and characterized, as recognized by Miller in column 6, lines 13-63, thus being an efficient, automated system. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 18.

Regarding *claim 19*, Allen further discloses a printer incorporating the system set forth in claim 10 (column 1, line 10-column 2, line 15, and column 4, lines 16-41).

Regarding *claim 20*, Miller further discloses a digital copier incorporating the system set forth in claim 10 (column 11, line 45 through column 12, line 6).

Allen & Miller are combinable because they are from the same field of endeavor, being printing devices that process overlapping image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Miller having a digital copier incorporating the system, in the system of Allen. The suggestion/motivation for doing so would have been that Allen's system would be usable in various embodiments, thereby being usable by more users, as recognized by Miller in column 12, lines 1-26. Therefore, it would have been obvious to combine the teachings of Miller with the system of Allen to obtain the invention as specified in claim 20.

Regarding *claim 21*, Allen further discloses a storage medium on which is stored a program that implements the method set forth in claim 1 (see Fig. 1, column 4, line 56-column 5, line 51).

Regarding *claim 22*, Allen further discloses a storage medium on which is stored data that has been processed according to the method set forth in claim 1 (column 4, line 56-column 5, line 51).

Regarding *claim 23*, Allen discloses a method of processing image data of a color image for marking (see abstract), the color image containing overmarked pixels where at least one first CMY color is to be overmarked by a black color (column 2, line 57-column 3, line 5, and column 4, lines 9-41), the method comprising generating information that designates the overmarked pixels (column 5, line 25-column 6, line 26, whereby the maximum total ink volume designates the counts of the color components at a pixel, with values over 255 designating an overmarked pixel), performing raster image processing to create a raster image of the color image (column 1, line 59-column 2, line 15), the raster image processing including overmarking

Art Unit: 2622

processing that allows both the at least one first CMY color and the black color to be separately included in the overmarked pixels in the same *image* (column 5, line 25-column 6, line 65), and modifying CMY image data of the overmarked pixels in the *image* to achieve undercolor reduction by reducing a value corresponding to a reduced amount of an underlying CMY marking material (column 4, lines 56-column 5, line 51).

However, Allen fails to expressly disclose if the overmarking processing that allows both the at least one first CMY color and the black color to be separately included in the overmarked pixels in the same *raster image*, and modifying CMY image data of the overmarked pixels in the *raster image* to achieve undercolor reduction by reducing a value corresponding to a reduced amount of an underlying CMY marking material.

Miller discloses a method of processing image data of a color image for marking (see abstract), the color image containing overmarked pixels where at least one first color is to be overmarked by a black color (column 4, lines 10-25, and column 6, lines 25 through 52), the method comprising generating information that designates the overmarked pixels (column 3, lines 35 through 50, and column 6, line 25 through column 7, line 13), performing raster image processing to create a raster image of the color image (column 5, lines 33 through 43, and column 7, lines 14 through 21), the raster image processing including overmarking processing that allows both the at least one first CMY color and the black color to be separately included in the overmarked pixels in the same raster image (column 5, line 33-column 6, line 63, and column 7, lines 21-45), and modifying image data of the overmarked pixels in the raster image (column 5, lines 44 through 67, and column 7, lines 21 through 64).

Art Unit: 2622

in control (amout : 0)/500

Page 16

Allen & Miller are combinable because they are from the same field of endeavor, being

printing devices that process overlapping image data. At the time of the invention, it would have

been obvious to a person of ordinary skill in the art to have Miller's raster image processing

teachings included within the image processing teachings of Allen. The suggestion/motivation

for doing so would have been that Allen's system would conform with well known standards in

the art of color printers, whereby rasterizing print data is in a typical process, as recognized by

Miller in column 4, lines 42-67, being included in a PostScript printer. Therefore, it would have

been obvious to combine the teachings of Miller with the system of Allen to obtain the invention

as specified in claim 23.

Citation of Pertinent Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure:

Pritchard (U.S. Patent Number 5,706,414) discloses a printer dot depleting system; and

Hudson et al. (U.S. Patent Number 6,042,211) discloses an ink drop volume

compensation printing system.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (571) 272-7410. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa Primary Examiner Art Unit 2622

Joseph R Phype

jrp